DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-018340

Address: 333 Burma Road **Date Inspected:** 15-Nov-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Le Feng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

Bridge No: 34-0006 **Component: TOWER & OBG Components**

Summary of Items Observed:

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

TOWER JETTY

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 007365

Ultrasonic Testing (UT)

This QA inspector performed UT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The

weld designation reviewed as follows:

NORTH TOWER LIFT-4 AT 119M ELEVATION, BACKFILL PLATE

NSD1 – FASA4 – 1B/E # 14; 16; 30

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Repair welding of weld joint # 15 located on South tower Lift-4 Skin 'A', 119 M Backfill plate SSD1 – FASA4 – 1B/E as per the critical weld repair report # T-CWR707.Rev-1. Welder is identified as 040582. ZPMC Quality Control (QC) Inspector is identified Sun Zi Wang. The welding variables recorded by QC appeared to comply

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

with the WPS -345+485 - SMAW - 4G(4F) - Repair - 2. (See attached photo)

Repair welding of weld joint # 26 located on East tower Lift-4 Skin 'A', 119 M Backfill plate ESD1 – FASA4 – 2B/E as per the weld repair report # T-WR3770. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS – 485 - SMAW - 2G(2F) - Repair - 1.

Repair welding of weld joint # 05 located on West tower Lift-4 Skin 'A', 119 M Backfill plate WSD1 – FASA4 – 2B/E as per the critical weld repair report # T-CWR704.Rev-1. Welder is identified as 202323. ZPMC Quality Control (QC) Inspector is identified Sun Zi Wang. The welding variables recorded by QC appeared to comply with the WPS -345+485 - SMAW - 2G (2F) - Repair - 2.

MEASUREMENTS OF GAP BETWEEN TOWER STRUT AND TOWER DIAPHRAGM

This QA Inspector carried out the measurements on Tower Strut Plate to Tower Diaphragm gap at top and bottom sides. The measurements were taken at 123 Metre, 131 Metre and 143 Metre elevations of erected tower lift-4. Measurements were recorded on the data sheet and submitted to the assigned task leader. The members are identified as Tower Components. The members designation reviewed are as follows:-

- 123 Metre Elevation
- 1. WD1-STSA4-5-123M-1
- 2. SD1-STSA4-5-123M-1
- 3. ED1-STSA4-6-123M-1
- 4. ED1-STSA4-6-123M-2
- 5. ND1-STSA4-6-123M-1
- 6. ND1-STSA4-6-123M-2
- 131 Metre Elevation
- 1. WD1-STSA4-5-131M-1
- 2. SD1-STSA4-5-131M-1
- 3. ED1-STSA4-6-131M-1
- 4. ED1-STSA4-6-131M-2
- 5. ND1-STSA4-6-131M-1
- 6. ND1-STSA4-6-131M-2
- 143 Metre Elevation
- 1. WD1-STSA4-5-143M-1
- 2. SD1-STSA4-5-143M-1
- 3. ED1-STSA4-6-143M-1
- 4. ED1-STSA4-6-143M-2
- 5. ND1-STSA4-6-143M-1
- 6. ND1-STSA4-6-143M-2

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)





Summary of Conversations:

No Relevant Conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Thomas Ho- 15002048250, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer